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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,815	07/29/2003	John Carney	007412.01068	8157
71/867 7590 04/13/2010 BANNER & WITCOFF, LTD ATTORNEYS FOR CLIENT NUMBER 007412 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051				
			EXAMINER	
			STOKELY-COLLINS, JASMINE N	
			ART UNIT	PAPER NUMBER
			2423	
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			04/13/2010 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/630,815

**Applicant(s)**

CARNEY ET AL.

**Examiner**

JASMINE STOKELY-COLLINS

**Art Unit**

2423

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2,4-11,13-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed on 1/15/2010 have been fully considered but they are not persuasive.

On page 8 of applicant's remarks, applicant argues that Lemmons does not modify Deller to teach a separation of application behavior from content and business rules. The examiner disagrees;

Deller teaches including dynamic business data placement in an application but does not go into detail about how the application author chooses the business data or placement thereof. He only teaches a method for inserting the data and is silent on any relationship between the application behavior and content and business rules.

Lemmons teaches placing advertisements in media content after production of the media. The application behavior (i.e. the attributes and actions specified in the authoring language) of Lemmons' produced media is not taken into account when selecting the content or placement of an ad. The selection of content (content rule) and placement of the ad (business rule) is chosen by PATTERN RECOGNITION to identify possible spaces for advertisements without taking the application's behavior or programming/authoring into consideration. Therefore, Lemmons does teach a separation of application behavior from content and business rules.

Applicant argues on page 8 that Deller already efficiently identifies advertising opportunities and therefore there is no motivation to combine it with a reference that provides the same benefit. The examiner disagrees;

Deller teaches specific ads being programmed into an application during development by using element names, such as "price". These names are specified by a particular business (col. 6 ll. 51-58). In other words, the ad is reserved for a particular business, but allows that ad's attributes to be changed (i.e. the price can change because the application developer did not program in a specific price, but rather a reference to the data contained in the price field). Lemmons presents additional opportunities for a variety of businesses without limiting the media to be reserved for a specific business during creation of that media. Therefore, Lemmons offers a greater amount of versatility in ad placement to Deller's invention. The fact that Deller's invention allows for efficient ad placement does not negate the benefit of adding Lemmons' teachings, which make it even more efficient. There is still a benefit in making something which is already efficient MORE efficient, just as there is a benefit in making something which is profitable more profitable or making something which is fast even faster.

***Claim Rejections - 35 USC § 103***

2. Claims 1-2, 5-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al (US 7,516,468 B1) in view of Lemmons (US 2003/0028873 A1) and Satuloori et al (US 7,363,612 B2).

Regarding claim 1, Deller teaches a method, comprising:

receiving an interactive television (iTV) application template (col. 2 ll. 54-66, fig. 3 shows receiving business data 202 and application script 207 at streamer 310) and an application descriptor (references to business data, col. 6 ll. 44-49) for an iTV application; querying a data storage repository for specific content (col. 6 ll. 44-49) according to the application descriptor (col. 3 ll. 4-6, col. 6 ll. 51-55); creating a dynamic data file configured to be populated in the application template (col. 6 ll. 51-59, col. 7 ll. 18-21); and storing the template and the dynamic data file in a centralized application management system (col. 6 ll. 62-65); and optimizing the iTV application for delivery to one or more client devices (col. 3 ll. 6-10);

Regarding the limitation requiring a separation of application behavior from content and business rules, Lemmons teaches the concept of automatically designating advertising space in media content after production of that content (title, pg. 9 sect. 0081). The examiner considers defining where advertisements should be placed "business rules" because decisions regarding ad placement opportunities are directed toward the business aspect of an application. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate business rules, such as ad placement, in the iTV application creation taught in Deller for the benefit of efficiently identifying advertising opportunities in order to maximize the amount of advertising (and

therefore, profit) in iTV content while reducing/eliminating the amount of manual effort required to place advertisements.

Regarding limitation "wherein the application template conforms to an authoring specification that describes a framework for the iTV application",. Satuloori teaches an application program with dynamic components, such as the applications being authored in Deller, in which an XML schema (i.e. authoring specification) is used to express application requirements and data representation requirements (col. 6 ll. 67-col. 7 ll. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to specify data requirements in the system taught by Deller for the benefit of ensuring that the dynamic files conform to the intended presentation and behaviors of the applications.

Regarding claim 2, when read in light of claim 1, Deller further teaches the iTV applications comprise one or more of (a) interactive program guides, (b) television menus, (c) content services, (d) virtual channels, (e) video on demand applications, (f) personal video recorder applications, (g) broadcast on demand applications, (h) enhanced television services applications (col. 1 ll. 33-52 teach the types of applications intended for the invention), (i) help, (i) customer support, (k) self service, (1) games, or (m) data service application.

Regarding claim 4, when read in light of claim 3, Deller further teaches the delivering the iTV applications to the one or more devices in response to requests from the one or more client devices, respectively (col. 5 ll. 12-18 teach an upstream communication link from the user to the interactive service provider that would enable user input for requesting application downloads).

Regarding claim 5, when read in light of claim 1, Deller in view of Lemmons and Satuloori further teaches the authoring specification comprises an extensible markup language (XML) authoring specification (Satuloori col. 6 ll.64-col. 7 ll. 2)

Regarding claim 6, when read in light of claim 5, Deller in view of Lemmons and Satuloori further teaches the presentation of the content by the one or more client devices is accommodated through one or more of the templates defined within the XML authoring specification (Deller col. 5 ll. 50-52).

Regarding claim 7, when read in light of claim 1, Deller in view of Lemmons and Satuloori further teaches applying one or more of the business rules in preparing the iTV application for delivery to the on or more client (Lemmons teaches automatically defining spaces in which ads can be placed, title, pg. 9 sect. 0081. The examiner considers ad placement rules to be business rules because it deals with the business aspect of the application rather

than entertainment. Although Lemmon's rules apply to post-production, the placement of ads in Deller's invention takes place before the data is sent to the streamer. When the references are taken in combination, the ads would be inserted after development of the application template and before transport, as disclosed in Deller fig. 3).

Regarding claim 8, when read in light of claim 7, Deller further teaches the framework for iTV application accommodates advertising, promotions, content placement packages or programming campaign definitions (Deller col. 5 ll. 48-50), so as to permit a selection of a specific advertisement, promotion or content at a time of preparation of the iTV content or a time of execution of the iTV application by the one or more client devices (col. 6 ll. 44-49, 59-62, 66-col. 7 ll. 3).

Regarding limitation "such selection being made according to one or more of the business rules", Lemmons teaches targeted advertising in page 1, section 0013. The selection of advertisements according to viewer demographic parameters constitutes business rules. It would have been obvious to one of ordinary skill in the art to selectively apply which advertisements will be presented to a viewer for the benefit of increasing the likeliness that a viewer will respond to the advertisement.



Regarding claim 9, when read in light of claim 8, Deller in view of Lemmons and Satuloori further teaches the one or more business rides comprise rules for placing or automating product offerings, promotions, advertising campaigns, VOD (Lemmons teaches automatically defining spaces in which ads can be placed, title, pg. 9 sect. 0081), broadcast-on-demand, transactional opportunities, and/or other types of content across disparate television services.

Regarding claim 10, when read in light of claim 9, Deller in view of Lemmons and Satuloori further teaches the iTV application is tagged in a manner such that the iTV application presents all placement opportunities as a set of programmable opportunities, wherein each programmable opportunity includes any location or set of locations within the iTV applications where content may be placed (Lemmons pg. 9 sect. 0080-0081).

Regarding claim 11, when read in light of claim 10, Deller in view of Lemmons and Satuloori further teaches said content including advertisements, promotions, data including text images and/or video, or another application (Lemmons pg. 9 sect. 0081).

Regarding claim 13, when read in light of claim 9, Deller in view of Lemmons and Satuloori further teaches the rules for placing and/or automating

product offerings accommodate multiple selection criteria chosen from the list including: location (Lemmons teaches the rules for placing and/or automating product offerings accommodate location (pg. 9 sect. 0081), current channel, current channel family, current channel category, time of day, offering category, current program, current program genre, current iTV application, current content type, and subscriber profile (Lemmons teaches advertisements may be personalized based on a per-viewer basis in pg. 1 sect. 0013).

Regarding claim 14, when read in light of claim 9, Deller in view of Lemmons and Satuloori further teaches the one or more business rules accommodate subscriber- specific rules according to a subscriber profile (Lemmons teaches advertisements may be personalized based on a per-viewer basis in pg. 1 sect. 0013).

Regarding limitation requiring the subscriber profile is "associated with a particular one of the client devices", official notice is taken that it is well known in the art of targeted advertising to maintain a user profile on a client device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a viewer profile in order to aid in targeting advertisements to specific viewers. It is further obvious to store the profile information on the individual set-top boxes for the benefit of avoiding the need for large storage capacities at the headend to store all of the subscriber's profiles.

Regarding claim 15, when read in light of claim 14, Deller further teaches the iTV application is configured to respond in a subscriber-specific manner to user interactions with the iTV application at the one or more client devices (col. 5 ll. 64-col. 6 ll. 8).

Regarding claim 16, when read in light of claim 8, Deller in view of Lemmons and Satuloori further teaches the business rules are selected dynamically at the time of execution of the iTV applications, or at the time of application creation ( Deller teaches in col. 6 ll. 44-49, 59-62, 66-col. 7 ll. 3 and fig. 3 that ads are inserted before being streamed to user devices. Lemmon's business rules apply to post-production, the placement of ads in Deller's invention takes place before the data is sent to the streamer. When the references are taken in combination, the ads would be inserted after development of the application template and before transport of the completed application, as disclosed in Deller fig. 3).

Regarding claim 19, when read in light of claim 1, Deller further teaches the receiving (by streamer 310, col. 2 ll. 54-66, fig. 3 shows receiving business data 202 and application script 207 at streamer 310), querying (by authoring tool 206, col. 6 ll. 44-49) and creating (by authoring tool 206) are performed by one or

more servers located at a data center (col. 7 ll. 37-43);  
the optimizing is performed at a cable head end (compiler 320 provides optimization col. 6 ll. 59-62, compiler 320 may be located at the head end col. 7 ll. 37-43); and  
the centralized application management system (located at the set-top box, col. 7 ll. 37-43) is located remotely from the data center and cable headend.

3. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al (US 7,516,468 B1) in view of Lemmons (US 2003/0028873 A1) and Satuloori et al (US 7,363,612 B2), and further in view of Krewin et al (US 2002/0078444).

Regarding claim 17, when read in light of claim 1, Deller in view of Lemmons and Satuloori teaches the system of claim 1.

Deller in view of Lemmons and Satuloori does not teach the framework for iTV application definition accommodates business rules, so as to permit a selection and use of a specific business rule at a time of execution of the iTV application.

Krewin teaches a system for targeted advertisement delivery in which rules regarding ad placement are applied at the time of intended presentation to the viewer (pg. 5 sect. 0081-0084). It would have been obvious to one of ordinary skill in the art at the time the invention was made to place ads in an application at the time of execution for the benefit of avoiding redundant

commercial transmission, as is proposed by other methods of targeted advertisement insertion (pg. 2 sect. 0013).

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al (US 7,516,468 B1) in view of Lemmons (US 2003/0028873 A1) and Satuloori et al (US 7,363,612 B2), and further in view of Markel (US 7,162,697 B2).

Regarding claim 18, when read in light of claim 1, Deller in view of Lemmons and Satuloori further teaches the framework for iTV application definition accommodates an application profile definition, defined by a set of capabilities that correspond to a set of actions in the authoring specification, which provides a common model for provisioning, managing, deploying (all applications are streamed through streamer 310), advertising and commerce (col. 2 ll. 59-66), layout (Deller col. 2 ll. 56-58), animation, dynamic data insertion (Deller col. 3 ll. 4-6), events and navigation, and optimization of the iTV applications.

Deller in view of Lemmons and Satuloori does not teach this can be done across different iTV operating environments.

Markel teaches text based script files, such as those produced by the authoring tool in Deller, can be sent through parsers which each support a specific platform (abstract). It would have been obvious to one of ordinary skill in

the art at the time the invention was made to incorporate the parsers taught by Markel in the system taught by Deller for the benefit of avoiding redundant application development and compilation for multiple, different target platforms.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASMINE STOKELY-COLLINS whose telephone number is (571) 270-3459. The examiner can normally be reached on M-F 9:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jasmine Stokely-Collins/  
Examiner, Art Unit 2423

/Andrew Y Koenig/  
Supervisory Patent Examiner, Art Unit 2423